

Mobilizing Earthmoving Operations with HCL Nomad

Real-Time Field Data Collection for a Large Construction Company



HCL Nomad

Executive Overview

A major European earthmoving and construction company used paper-based processes to collect essential operational data from field vehicles. Drivers recorded inspections and load manifests on paper, resulting in delays and increased administrative work due to manual data entry into central systems after each shift.

Partnering with Pinja, the company extended its HCL Domino mass-tracking applications to mobile tablets using HCL Nomad. This modernization removed paper workflows, enabled near real-time reporting, and maintained the offline functionality required for vehicles outside network coverage.

The Challenge

Slow Manual Data Entry

For years, drivers performed vehicle start-up inspections and recorded haul information on paper forms. At each shift's end, these forms had to be manually entered into the central database, causing delays and increasing the risk of errors.

Handwritten manifests were often illegible or incomplete, requiring follow-up and slowing processes such as reporting, project tracking, and billing.

The Solution

Mobilizing with HCL Nomad

Pinja utilized the company's established HCL Domino environment, which had supported mass-tracking applications for over a decade. With HCL Nomad Mobile, these applications were deployed directly to tablets in earthmoving vehicles.

A mobile-optimized interface was developed for tablet users, allowing drivers to complete inspections and digital load manifests directly in the field. The solution retains Domino's replication model, automatically synchronizing data with central servers when connectivity is available.



The Results

Efficiency and Real-Time Data

Deploying HCL Nomad fundamentally changed how the company captures and processes operational data in the field.

100% elimination of manual data re-entry from paper forms into the database.

Improved data quality through digital entry and elimination of illegible handwriting.

Near real-time reporting through integration of Domino API with reporting systems.

Simplified driver workflows through a mobile-optimized interface for inspections and load logging.

The solution also maintained essential offline capability for vehicles in remote areas. Data entered on tablets is stored locally and automatically replicated once connectivity is restored, ensuring continuous operation without data loss.



By mobilizing our Domino applications with HCL Nomad, we eliminated paper processes and gained near real-time visibility into field operations.



Key Capabilities Delivered

Paperless Field Operations

Digital load manifests and inspections replace manual paper workflows.

Offline-First Mobility

HCL Nomad enables uninterrupted data entry even when vehicles operate outside network coverage.

Real-Time Operational Visibility

Domino API integration pushes field data into reporting systems almost immediately.

About PINJA

Pinja helps industrial companies embed sustainability directly into daily operations. Our AI-powered SaaS solutions improve efficiency, reduce waste and disruptions, and enable reliable compliance with increasingly strict environmental and traceability requirements. For more information go to: <https://www.pinja.com>.

About HCLSoftware

HCLSoftware is a global leader in software innovation, dedicated to powering the Digital+ Economy. We develop, market, sell, and support transformative solutions across business and industry, intelligent operations, total experience, data and analytics, and cybersecurity. Built on a rich heritage of pioneering spirit and unwavering commitment to customer success, we deliver best-in-class software products that empower organizations to achieve their goals. Our core values of integrity, inclusion, value creation, people centricity, and social responsibility guide everything we do. HCLSoftware serves more than 20,000 organizations, including a majority of the Fortune 100 and almost half of the Fortune 500. Learn more about how HCLSoftware can help you achieve your goals at <https://www.hcl-software.com/>